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ABSTRACT

This papers asserts that unparalleled social changes call for a renewed emphasis on education and for education of a different nature. These changes demand not only reflective inquiry in the practice of knowledge, but in the ethics and values by which the paths that lead to educational goals are chosen. Institutions of higher learning are being led to question the very nature of knowledge and inquiry on which they are based. Whether or not wisdom can be taught is being debated, and whether, if education can impact the development of wisdom, the university should focus solely on the development of knowledge is also under scrutiny. The most fundamental implication for universities is the importance of reinstating deliberation about ideas within an open community as the foundation of the educational and research environment. Building an academic environment that fosters critical thinking and problem solving not only in students but in the faculty and staff of institutions will be a major task for the next generation of educators. By developing critical thinkers, universities are ensuring the future of democracy. (Contains 26 references.) (SLD)

Educating Critical Thinkers for a Democratic Society

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For over a decade critical thinking has gained momentum in America (Paul, 1992). However, its roots run far deeper in the fabric of our culture, from John Dewey's reflective thinking (Dewey, 1910/1991) to C.S. Peirce's logic as inquiry (Peirce, 1898/1992) and back to the ideals of Greek citizenship. Yet today, on the eve of the 9/11 anniversary, we are faced with the very conditions that demand a resurgence of such vision if we are to meet the challenges necessary to maintain and enhance our democratic way of life. Our society is undergoing dramatic upheaval and we are being forced to assume responsibility for unprecedented decisions in order to respond politically and economically to our time. Because of extraordinary societal change, trust of the American population in institutions, including universities, is eroding. Robert Bellah noted that "one of the greatest challenges especially for individualistic Americans, is to understand what institutions are--how we form them and how they in turn form us" (Bellah et al. 1991, p. 5). He comments that instead of the patterned ways we interrelate to form community, institutions are now seen as autonomous systems going on "over our heads." Recent examples of corporate greed and the use of institutions for personal ends has led to a selfishness that threatens to materially impoverish the next generation of Americans and which has already created an impoverishment of meaning for the current generation. Although this phenomenon is most visible in business and industry and in the growing unwillingness of many highly qualified individuals to run for government office, it is also apparent in higher education. Nevertheless, it is at just such a juncture that John Dewey (1908/1980) cited the importance of reflective thinking:

> This intellectual search for ends is bound to arise when customs fail to give required guidance. And this failure happens when old institutions break down; when invasions from without and inventions and innovations from within radically alter the course of life. . . . Moreover, when social change is great, and a great variety of conflicting aims are suggested, reflection cannot be limited to the selection of one end out of a number which are suggested by conditions. Thinking has to operate creatively to form new ends. (p. 30)

Such unparalleled change calls not only for a renewed emphasis on education, but for education of a different nature. It demands not only reflective inquiry in the practice of our knowledge but in the ethics and values by which we choose the paths that will lead to our goals (Maxwell, 1992). Thus, our institutions of higher learning are being led to question the very nature of knowledge and inquiry on which they are based (Scott & Awbrey, 1993).

Knowledge and Wisdom

Gisela Labouvie-Vief (1990) observes that what makes "the artist, the poet, or the scientist wise is not expert technical knowledge in their respective domains but rather knowledge of issues that are part of the human condition" (p. 78). She describes the revival of interest that is taking place in the ancient topic of wisdom as the emergence of a "new paradigm". The focus of Western civilization has been on the "primacy" of the objective and logical rather than the subjective, inner experience. Labouvie-Vief labels these orientations as *logos* and *mythos* respectively. Unlike traditional Western thought, the new paradigm views *logos* and *mythos* as forming a "balanced dialogic" relationship, wisdom (p. 52). The breaking down of the old paradigm can in part be attributed to the "deconstruction of the primacy of *logos*" by the post-modernists. However, balance will not be achieved by "confusing the contingent with the desirable" or by entirely jettisoning the notion of justifiable truth (p. 64). Therefore, in this view, to seek wisdom is not to replace the objective with the subjective but to seek a balance of knowledge and values, an integration of the qualities of self. Labouvie-Vief sees this as a lifelong project of movement through levels of development, from *intrasystem* to *intersystem* and beyond to the *integrated* level (p. 69).

Can Wisdom be Taught?

During the fifth century B.C. spirited dialogues arose about the nature of *arete* (virtue) and whether such wisdom could be taught. To the ancients *arete* "comprised all those qualities in a man [*sic*] which made for success in Greek

society and which could confidently be expected to secure the admiration of a man's fellow-citizens" (Kerferd, 1989, p. 131). Believing that wisdom or virtue is inborn and not subject to the impact of education can have extreme consequences. One consequence is the natural elitism inherent in this belief, which denies the 'good life' to those not wise enough to be wellborn. However, even if we believe that education can impact the development of wisdom, elitism may still plague our efforts. "The university is supposed to educate those who are more intelligent and to set up standards for their achievement which cannot be met by most men and women. This cannot but be irritating to democratic sensibilities" (Bloom, 1990, p. 367). As such statements reveal, there are respected academics even today who believe that education in its highest form is not the purview of the many but the right of the few. Indeed, the warm reception given Bloom's views by the American public may indicate that such beliefs have gained even wider acceptance within society. However, unless care is taken, selection by 'talent' can also become another form of rationalized exclusion based not on a student's potential but on prior privilege creating an artificial aristocracy (Barber, 1992) and leading to further elitism (Kerr, 1991).

Should the University "Teach" Wisdom?

Still, even if we believe that education can impact the development of wisdom, some might argue that the university should focus solely on the development of knowledge. This view has led to a generation of students seeking desperately for meaning in their lives and in the world around them (Bok, 1990). The idea that knowledge can be made value-free and divorced from society leads to empty knowledge and empty lives.

Many of today's largest research universities are also land-grant universities. The Morrill Act of 1862 creating these institutions was designed to promote practical service to the community and to advance applied science while providing broader access to higher education for the people of each state (Oakley, 1992). But are we only fulfilling the letter not the spirit of this Act if we do not provide an environment for the development of *all* who attend such institutions? Equality of acceptance into university, even of talented students, will not insure equal quality of education unless we make it so. As Robert Reich (1992) perceptively commented:

> Some American children--no more than 15 to 20 percent--are being perfectly prepared . . . Their parents take them to museums and cultural events, expose them to foreign travel, and give them music lessons. At

> home are educational books, educational toys, educational videotapes, microscopes, telescopes, and personal computers replete with the latest educational software. . . . They often accumulate a large number of facts along the way, yet these facts are not central to their education . . . More important, these fortunate children learn how to conceptualize problems and solutions. . . . The student is taught to get *behind* the data--to ask why certain facts have been selected, why they are assumed to be important, how they were deduced, and how they might be contradicted. The student learns to examine reality from many angles, in different lights, and thus to visualize new possibilities and choices. (pp. 227-230)

Allowing talented students from less advantaged backgrounds to attend university will not *automatically* provide them with the tools to engage their environment or the psychological context in which to place their experiences. Without further commitment on the part of the university to providing an environment that fosters critical thinking and problem solving the land-grant philosophy can become an empty promise. For those who come without the background that allows them to transform knowledge and experience into wisdom, the university experience may be, at best, a detached one.

How is Wisdom Learned?

By what methods, then, can students learn to transform their knowledge and experience into wisdom? We argue that inquiry and critical thinking form the process for discovering meaning in our lives. According to John Dewey (1929/1988), human beings throughout the ages have been seeking "perfect certainty", looking for antecedent, fixed universals and glorifying the notion of invariants while fearing change. However, this quest for invariants separated knowledge from action and the separation led to a spectator theory of knowledge in which the individual was merely a passive receptacle, a view that was not altered until the development of the scientific method.

Dewey (1929/1988) asserts that science aimed at the "discovery of constant relations among changes in place of definition of objects immutable beyond the possibility of alteration" (p. 82). Why, then, did the rise of empiricism which swept the world's universities *not* lead to the type of critical thinking that Dewey and Peirce championed? The answer lies in the inability of the positivists to apply inquiry to their own underlying assumptions. "Herein we locate the source of that internal division which was said to characterize modern philosophic thought. It accepts the

conclusions of scientific inquiry without remaking the conceptions of mind, knowledge and the character of the object of knowledge that are involved" (p. 58).

Although Peirce's and Dewey's conception of inquiry had much in common with empiricism it also had important differences:

> [Pragmatism] is not empirical in the literal sort of way suggested by the medieval slogan: 'Nothing in the mind that is not first in the senses.' That is to say, it does not attempt to guarantee empirical content by monitoring the original sensory input, and then following it through the intellectual processes to make sure nothing is added. On Peirce's view a great deal may be added by any person, because the experiences have to be sorted out, categorized, related to other experiences past, present, and possible future ones, and calculations and hypotheses have to be worked out as to possible outcomes. (Gruender, 1983, pp. 282-284)

For Peirce the interpreter is a primary element in the process of inquiry. Within the scientific community the rise of modern physics, too, has seen the idea of detached "Human Observers and Agents" totally separate from their "Natural Objects of study" evolve into a more interactive view in which the observer is an integral part of the conditions of inquiry (Toulmin in Dewey, 1929/1988, p. xvi).

"Peirce's theory of inquiry stands as one of the great attempts to show how the classic dichotomies between thought and action, or theory and praxis can be united in a theory of a community of inquirers committed to continuous, rational, self-critical activity" (Bernstein, 1971, p. 199). The works of Peirce and Dewey are foundational to many modern theories of critical thinking, all of which share the pragmatist imperative: "Do not block the way of inquiry" (Peirce, 1898/1992, p. 178).

With regard to knowledge, then, we have postulated that the method of critical thinking and active inquiry can best be used to examine how knowledge operates in the pursuit of one's goals, but is it enough? Can wisdom be apprehended through knowledge alone? Philosopher Nicholas Maxwell (1992) writes:

> We urgently need a new, more rigorous kind of inquiry that gives intellectual priority to the tasks of articulating our problems of living and proposing and critically assessing possible cooperative solutions. This new kind of inquiry would have as its basic aim to improve, not just knowledge, but also personal and global wisdom--wisdom being understood to be the capacity to realize what is of value in life. (p. 205)

In this view apprehension of wisdom lies in the process of employing active inquiry to discern meaning by applying it not only to knowledge but also to ethical concerns.

According to Dewey (1908/1980), human beings have a choice about moral method. They can adhere to "customary morality" following tradition or they can employ a form of "reflective" ethics. He notes that there is an "intimate organic connection between the methods and materials of knowledge and moral growth" and when this connection is overlooked, as in much customary morality, "knowledge is not integrated into the usual springs of action and the outlook on life, [and] morals become moralistic--a scheme of separate virtues" (p. 359). Reflective morality, as held by Dewey, operates from the principle "be this" not "do this". He speaks of the "hollowness of outer conformity" and asserts that "conduct is not truly conduct unless it springs from the heart" (p. 3). Our actions, then, are the continuous manifestations of personality and character, not isolated incidents.

For an act to be chosen in this way it must be of value. Dewey notes that the word 'value' means not only that something is seen as intrinsically worthwhile but that the word also denotes the act of valuing, of comparing and judging. Reflective ethics views morality as critically "valuating". In this view morality is not a set of rules imposed through negative punishment but the engagement of an active intellect. Reflective moral theory can enable "a perplexed and doubtful individual to clarify his own particular problem by placing it in a larger context" and "render personal reflection more systematic and enlightened, suggesting alternatives that might otherwise be overlooked" (Dewey, 1908/1980, p. 7).

The suspension of judgment allows us to examine information and to determine whether an action can be considered *good* in current circumstances. "Toleration is thus not just an attitude of good-humored indifference. It is positive willingness to permit reflection and inquiry to go on in the faith that the truly right will be rendered more secure through questioning and discussion" (Dewey, 1908/1980, p. 84).

Still, we might ask whether such open questioning and application of critical thinking to ethical questions will not lead to confusion and relativism. Fortunately, we are saved from such a conclusion by two integral features of

reflective morality. The first, as we have seen, is the concept of actions as expressions of ongoing character. The second, is the idea that motives and consequences are "two poles of the same thing" (Dewey, 1908/1980, p. 16).

Are Current University Methods Too Constrained?

The practice of critical thinking and inquiry can only flourish in an open environment which fosters deliberation. As Benjamin Barber (1992) writes, the university does not *have* "a civic mission . . . the university *is* a civic mission" and "education is a social activity that can take place only within a learning community bringing together reflection and experience" (p. 222). Still, we often find the university constrained by its historical and philosophical context and structure. The high degree of specialization and departmentalization of its faculty have drained the life from the very deliberations that underlie the knowledge being learned, creating what Gerald Graff of the University of Chicago called "a system of patterned isolation . . . diminishing the need for debate among contiguous specialists and permitting the job of instruction to proceed as if on automatic pilot" (Oakley, 1992, p. 160). Francis Oakley (1992) comments:

> In the course of any given week, as they move in a liberal arts setting from courses in the natural sciences to classes in art, literature, the behavioral sciences, history or religion, I have the uneasy sense that many of our students are fated to traverse epistemological centuries, to maneuver among radically divergent theories of knowledge without being fully conscious of so doing, and without getting adequate help in the process. (p. 161)

The constraints of the university's methods of seeking and transmitting knowledge and its evaluation and reward systems also impact its ability to actively participate in solving the crucial problems facing the society through university research. Derek Bok (1990) notes that "subjects that attract outstanding teachers and scholars are generally ones that are susceptible to verifiable experiments . . .Yet most of the neglected topics relating to poverty and competitiveness require forms of inquiry that lack these characteristics" (p. 45).

What Are the Implications for Our Universities?

Perhaps, most fundamental is the importance of reinstating deliberation about ideas within an open community as the foundation of our educational and research environment. Such democratic dialogue must allow both students

and faculty to examine their underlying assumptions and beliefs. There are signs that such a movement is underway. However, as we have seen, the inflexible departmental specialization that has overtaken many of our universities makes such deliberation difficult at best. James Duderstadt (1992), former President of the University of Michigan points out that "the rigid institutionalization of specialized disciplines is a barrier to both creative thinking and curricular change. The disciplines need to be integrated, and, in some cases, seriously reformed."

One fundamental way in which the curriculum can be reformed is by reducing the barriers between research and teaching and by bringing the wealth of creativity within our universities to bear directly on society's problems. The gap between research and teaching can be closed by students and faculty working together on 'real-world' problems instead of avoiding the 'messy', qualitative world of *praxis*. Harold Enarson (1989), President Emeritus of Ohio State University sees this reinvolvement in the life of the wider community as a new age of *pioneering*:

> It is time for the land-grant universities to again pioneer, reaching out to help our citizens practice the art of self-government and effective administration of public programs; reaching out to address public policy issues; reaching out to the disadvantaged; reaching out to help young Americans develop the values that undergird our democracy.

Because the ills of our society have become so pressing, we are forced to a reexamination of all the institutions on which we depend. Higher education will not be exempt from this assessment. Bok warns that universities will not be able to "go on enjoying the benefits of taxpayer support, and being the celebrated centers of respected learning and discovery unless we are prepared to use those abilities in some substantial part to help the society that sustains us" (Gilley, 1991, p. 84). Ways must be found to overcome the barriers that have traditionally separated the universities from each other and from society. "The Academy, of all institutions, should not be isolated towers but a town square, a place where people come together for commerce of ideas and community of spirit." (Rawlings, 1988).

The goals of addressing society's problems will require not only a breakdown of the barriers between the university and wider society but also movement toward institutions that are truly global in reach. Just as major corporations have moved from national to multinational to global networks, so too, our learning institutions have become part of a global knowledge web joined by vast telecommunications networks. The implications of this new environment

that allows the instantaneous sharing of information and dialogue in the pursuit of common inquiry is at once staggering and wonderful.

Wisdom and a Democratic Society

Building an academic environment that fosters critical thinking and problem solving, not only in students but in the faculty and staffs of our institutions, will be a major task for the next generation of educators. However, facilitating critical thinking and inquiry in individuals will enhance their lives not only by providing the skills of abstraction, systems thinking, experimentation, and collaboration that will make them competitive in the new global economy (Reich, 1991) but by enriching the *meaning* in their lives. At the same time, by developing critical thinkers, we are ensuring the future of our democracy.

The importance of preparing individuals for their role as citizens in a democratic society is well documented. However, the reverse assertion is less broadly understood. That is, a democratic environment, in which dialogue and critical thinking are prized, is not only facilitative of but vital to the full development of intelligence. Philosopher Hilary Putnam (1992) refers to what he calls the *epistemological justification of democracy* which he attributes to John Dewey, "The claim, then, is this: Democracy is not just one form of social life among other workable forms of social life; it is the precondition for the full application of intelligence to the solution of social problems" (p. 180).

Philosopher Thomas Bridges of Montclair State University asserts that people are raised first in particularistic communities—families and cultures – that begin shaping identities and aspirations "virtually form birth" (Bridges, 2002). The perspectives that emerge from such communities are "totalizing", that is, they provide the individual with a comprehensive view of life and how it should be lived. However, Bridges notes, that to act as citizens in a democracy, the individual must see other citizens as "free and equal." This requires moving beyond the biases of any one comprehensive view. Therefore, a primary role of education is to help citizens to reach beyond their particular situations and allow them to come together in ways that both create and support democratic dialogue (Bridges, 2002). Open dialogue among free and equal citizens undergrids the democratic process and is essential for

its functioning. To paraphrase Dewey, democracy cannot be founded on "cutomary" habits, a set a rules and dogma learned and simply repeated as patriotic. It must be "reflective." It must spring from the heart as a process leading to action. Otherwise, it becomes merely the "hollowness" of outer conformity rather than democracy and our nation risks lossing the very freedoms that it professes.

This significant role, helping a pluralistic people come together to think critically about their future, is not required of education under other homogenous forms of government which do not allow citizens the freedom to maintain their pluralism. But in a civic society that holds that its citizens are equal and free to differ in their worldviews, citizens must become responsible for engaing in democratic dialogue and the critical thinking and reflection necessary to address the issues that society faces. Thus, the challenge of transforming our educational institutions to meet the new century may be more daunting than even that which faced our predecessors at the turn of the last century. However, a growing chorus of voices within and outside of academe, dissatisfied with current educational practice, is calling for a transformation that moves beyond modernism, and even post-modernism, to a new transcultural, connected learning environment that fosters wisdom through the application of dialogue and critical inquiry. They seek an environment that will not only provide knowledge but inspire the wisdom needed to address the social and political problems of a new age. Ideally, it will be an educational environment both founded in and supportive of democracy.

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